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GB 1515944 A US 4819294 A US 4658461 A
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(54) Adjustable paint pad assembly

(57) A paint pad is mounted on plate 18 of support head 8, which support head is pivotally connected at 42 to a handle 2. The pivoted handle can be locked in a selected angular position by latch 44 engaging with teeth 16. This allows the pad to be kept parallel to the surface to be painted and is particularly useful in painting horizontal or restricted spaces.

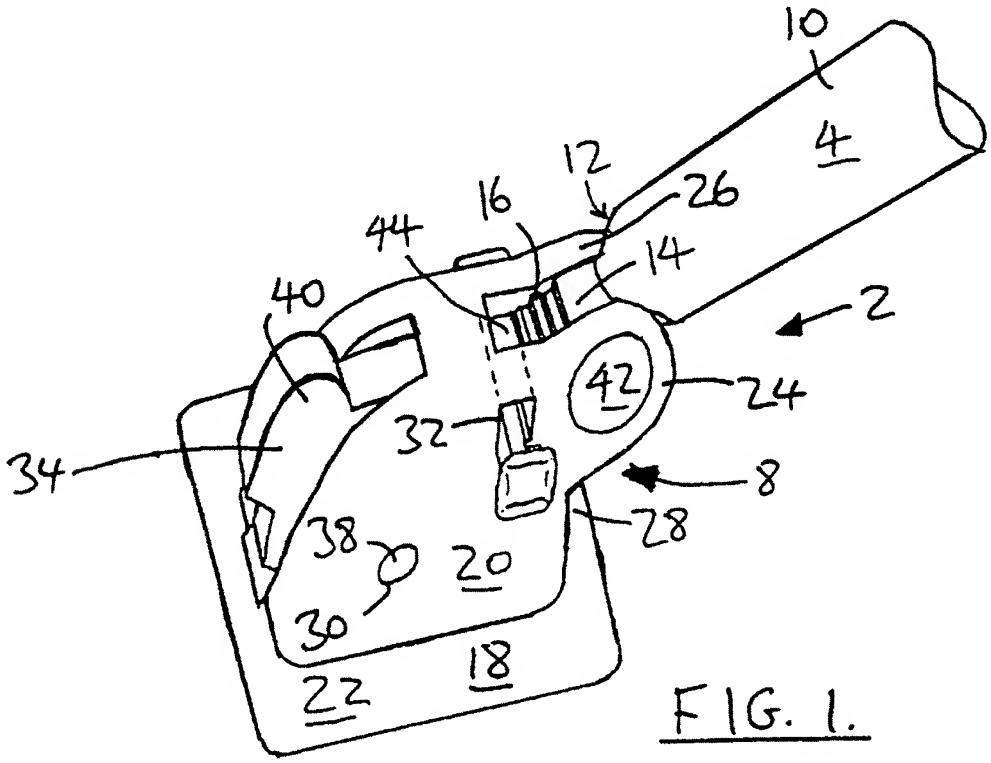

FIG. 1.

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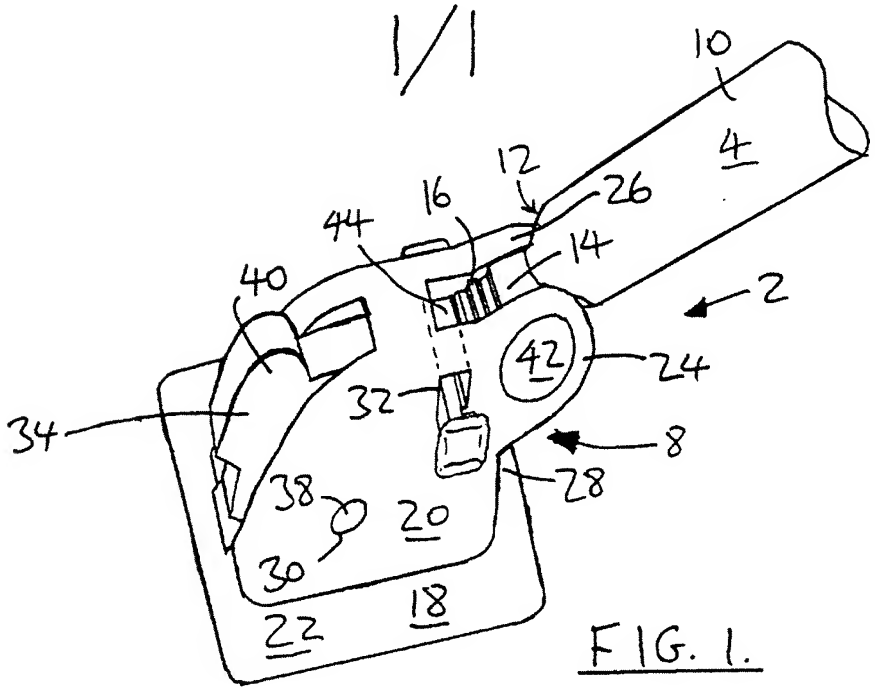

FIG. 1.

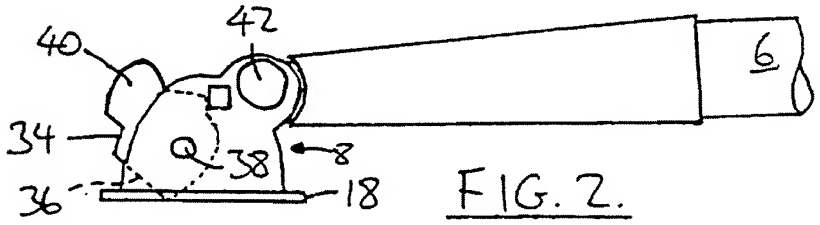

FIG. 2.

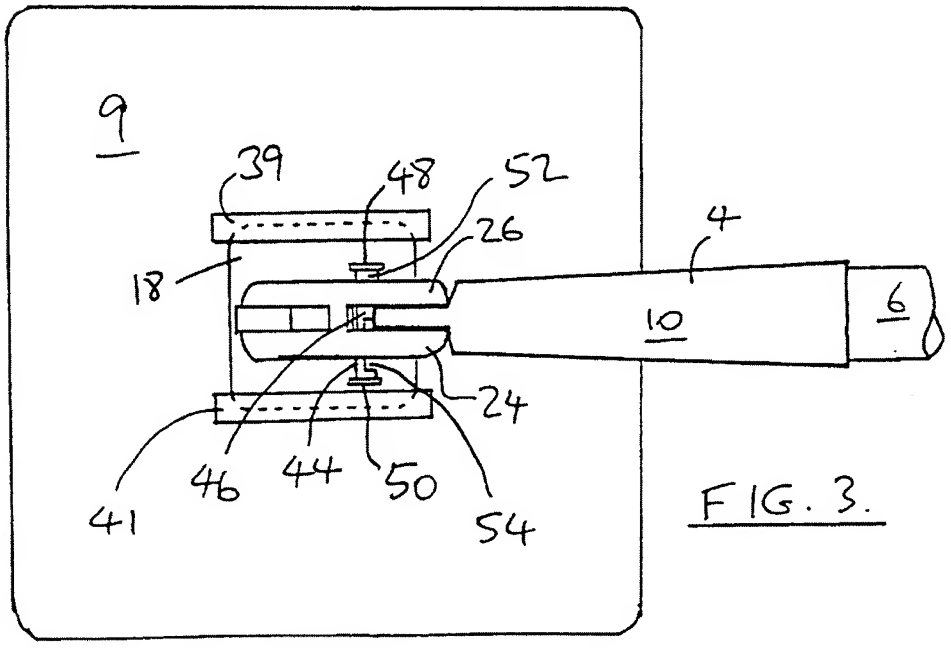

FIG. 3.

IMPROVEMENTS IN AND RELATING TO TOOLS

This invention relates to tools for painting. It is particularly, but not exclusively, concerned with a tool mount, handle or assembly for a painting tool, for example a paint pad.

Paint pads are sometimes used with a long pole having an assembly at one end mounting the pad. Sometimes paint pads are used without a pole. A paint pad is usually comprised of nylon or mohair fibres in order that it is able to soak up paint in order that the paint may be applied to a surface by pressing the paint pad to that surface and moving the paint pad. The paint pad is in a fixed angular relationship to an assembly or a pole (if used).

Although paint pads according to the prior art are suitable for use in painting vertical surfaces, such as walls and parts of stairs, difficulties arise when horizontal surfaces such as ceilings are to be painted. The paint pad has to be applied to a surface such that the paint pad and the surface are substantially parallel. Since the paint pad and the pole or assembly are perpendicular to one another, the pole or assembly has to be held such that it is vertical with the paint pad applied to a ceiling directly above the head of a painter. Paint can drip directly onto the painter.

In applications where space is restricted, such as painting in small rooms or in corners, the length of a pole means that it is not always possible to stand back sufficiently from the surface being painted to apply the pad correctly across the surface.

A further disadvantage is that when a paint pad cannot be placed flat upon a surface to be painted, movement of the paint pad across that surface cause preferential wear of the edges of the pad.

It is an aim of the present invention to alleviate some of the problems discussed in the foregoing.

According to a first aspect the invention provides a paint pad assembly comprising a head adapted to mount a paint pad and a support member adapted to move the head during a painting operation in which the head is connected to the support member in such a manner that the head is angularly adjustable in relation to the support member.

Preferably locking means is provided to enable the head and the support member to be locked in a fixed angular relationship.

Preferably the locking means are selectively operable by the user.

The support member may comprise a sleeve to fit onto an end of a pole. The paint pad may comprise a fixture which is adapted to receive the head as a sliding fit.

Advantageously, locking means are provided between the sleeve and the base. The locking means may be adapted to lock the sleeve and the base against relative angular movement.

Preferably the support member and the head are pivotally connected.

By having an angularly adjustable head, the support member (and pole if included) does not have to be perpendicular to a surface as the pad is applied to the surface (or at any fixed angle to the surface). Thus a user does not have to stand directly beneath a paint pad when painting ceilings and can reach points which would otherwise be inaccessible or difficult to reach, for example corners. He can select his own handle/pad angle to suit his own height, and the conditions he is experiencing.

The support member and the head preferably each comprise regions adapted to receive a pivot pin. The pivot pin may connect the support member and the head together.

Preferably the head comprises two limbs. The limbs may be substantially parallel. They may be separated thus defining a gap between them.

Preferably the support member has an end member adapted to fit between the two limbs. Alternatively the head may comprise an end member and the support member may comprise two limbs.

The locking means may comprise a latching surface adapted to engage with one of a plurality of teeth.

The latching surface may be provided on a reciprocating member. The reciprocating member may have a first position in which the latching surface is able to engage with one of the plurality of teeth and a second position in which the latching surface is unable to engage with one of the plurality of teeth. The reciprocating member may be located in one or both of the limbs.

The teeth may be arranged on the end member. The teeth may be arranged around the periphery of the end member, for example along part of a circle.

The pivot pin may pass through the centre of one or more of the limbs and the end member.

The head may be provided with engagement means. The engagement means may comprise a cam surface. The engagement means may be adapted to move angularly from a first position to a second position.

A paint pad can be mounted on the paint pad assembly. When the engagement means is in the first position the cam surface engages against the back of the paint pad and locks the paint pad against sliding movement relative to the paint pad assembly.

When the engagement means is in the second position the cam surface is not in engagement with the paint pad and the paint pad can be slid off the paint pad assembly.

According to a second aspect the invention provides a paint pad assembly for mounting a paint pad comprising a support member and a head which are angularly moveable relative to each other.

An embodiment of the invention will be described below, by way of example only, with reference to the accompanying drawings in which:-

Figure 1 shows a perspective view of a paint pad assembly according to the invention;

Figure 2 shows a side elevation of a paint pad assembly according to the invention; and

Figure 3 shows a plan view of a paint pad assembly according to the invention attached to a paint pad.

Figure 1 shows a handle 2. The handle 2 comprises a sleeve 4, which is adapted to fit onto a pole 6, and a head 8 which is adapted to lock onto a paint pad 9 (shown in Figure 3).

The sleeve comprises a hollow tapering region 10 closed at one end 12. The end 12 terminates in a circular formation 14 having a plurality of teeth 16 arranged around its periphery. A pivot hole passes through the centre of the formation 14.

The head 8 comprises a plate 18 with a body 20 rising from a face 22 of the plate 18. The body 20 is substantially hollow. Two limbs 24 and 26 extend from a rear side 28 of the body 20. A pivot hole passes through each of the limbs 24 and 26 (and register with the hole in the formation 14).

The body is provided with two pairs of further holes 30 and 32.

An angularly moveable cam 34 is provided mounted on the body. In order to understand the nature of the cam 34 better, reference is also made to Figure 2. The shape of the cam is shown in dotted outline in this Figure. The cam 34 has a cam surface 36 and is manually angularly moveable about a pivot pin 38 which extends from both sides of the cam 34. The pivot pin 38 is received in the holes 30. A lever member 40

extends from the cam 34 and is present to enable a user of the handle 2 to move the cam 34 angularly.

As shown in Figure 3, the plate 18 is adapted to be slid onto the paint pad 9, with opposing edges of the plate being received in overlapping flanges 39 and 41 provided on the paint pad 9. Once the pad 9 is correctly located on the handle 2, the member 40 is pressed towards the plate 18, the cam 34 moves angularly and the cam surface 36 engages with the rear surface of the pad 9 to prevent the pad sliding off the handle 2.

The sleeve 4 and the head 8 are connected together, for pivotal movement, by a pivot pin 42 which passes through the pivot holes in the two limbs 24 and 26 and the circular formation 14.

A latch 44 is located in the holes 32 in the body 20. The latch 44 comprises an intermediate portion 46 between two end stops 48 and 50. Half 52 of the length of the intermediate portion 46 is C-shaped in cross-section. The other half 54 of the length of the intermediate portion 46 is cut-away leaving a rectangular section.

The latch 44 is adapted to latch selectively with one of the plurality of teeth 16. When the latch is positioned such that the half 52 overlaps with one of the teeth 16, the tooth 16 engages in part of the C-shaped section and thus the circular formation 14 and the sleeve 4 are held substantially against movement relative to the head 8.

When the latch 44 is positioned such that the half 54 overlaps with one of the teeth 16, there is no

engagement between the latch 44 and the circular formation 14 and thus the sleeve 4 is fee to move angularly with respect to the head 8.

Thus the sleeve 4 and the head 8 can be locked together in a chosen angular relationship.

Of course, the sleeve 4 can itself be a handle which the user grips to use the tool if he does not want to mount the device on a pole.

In use the handle 2 (with or without a pole) will be used to apply paint to a surface. A paint pad is slid onto the handle 2 and located in accordance with Figure 2. The lever member 40 is pushed downwards (towards the paint pad) and the cam surface 36 engages with the rear surface of the pad to hold the pad on the handle 2. A user can adjust the angle between the head 8 and the sleeve 4 by sliding the latch 44 to a "free" position and setting the angle to that desired. Once correctly set the head 8 and the sleeve 4 can be locked together by sliding the latch 44 to a "locking" position. Movement of the latch 44 and adjustment of the angle can be carried out by one hand only, which can be useful if the user is up a ladder or has something in his other hand.

In an alternative embodiment of the invention a different kind of locking means may be operable between the head and the sleeve. For example, the head and the sleeve may each have respective surfaces which engage or interlock to some degree to restrict relative movement. There may simply be a means to clamp such surfaces together to restrict relative movement.

THE CLAIMS

Tool handle with adjustable part which allows adjustments on a pivot, it then can be locked into position with a slide that has channels which locks the gear into the desired position allowing the Paint Pad to be flat against the surface being painted.

The Tool Handle is an attachment for Paint Pads.

The Patent Office

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Claims searched: 1

Examiner: Neil Franklin
Date of search: 31 May 1996

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): A4K(KEX) B2L(LCGX) B4K(KJB)

Int Cl (Ed.6): B05C 17/00,17/10,17/12; B25G 3/38

Other: Online: WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	GB 1 515 944	(MICDOR) See Fig 1 & p3 lines 16-26	1
X	US 4 819 294	(CALVERT) See eg Fig 5 & col 7 lines 16-22	1
X	US 4 658 461	(ROE & MOORE) See eg col 3 lines 34-42	1
X	US 4 517 700	(PINTO) See eg Fig 2 & col 2 lines 54-64	1
X	US 4 424 603	(BALINT et al.) See col 3 lines 1-15	1
X	US 4 219 899	(ZURAWIN & RICCIUTI) See eg Fig 8	1

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.